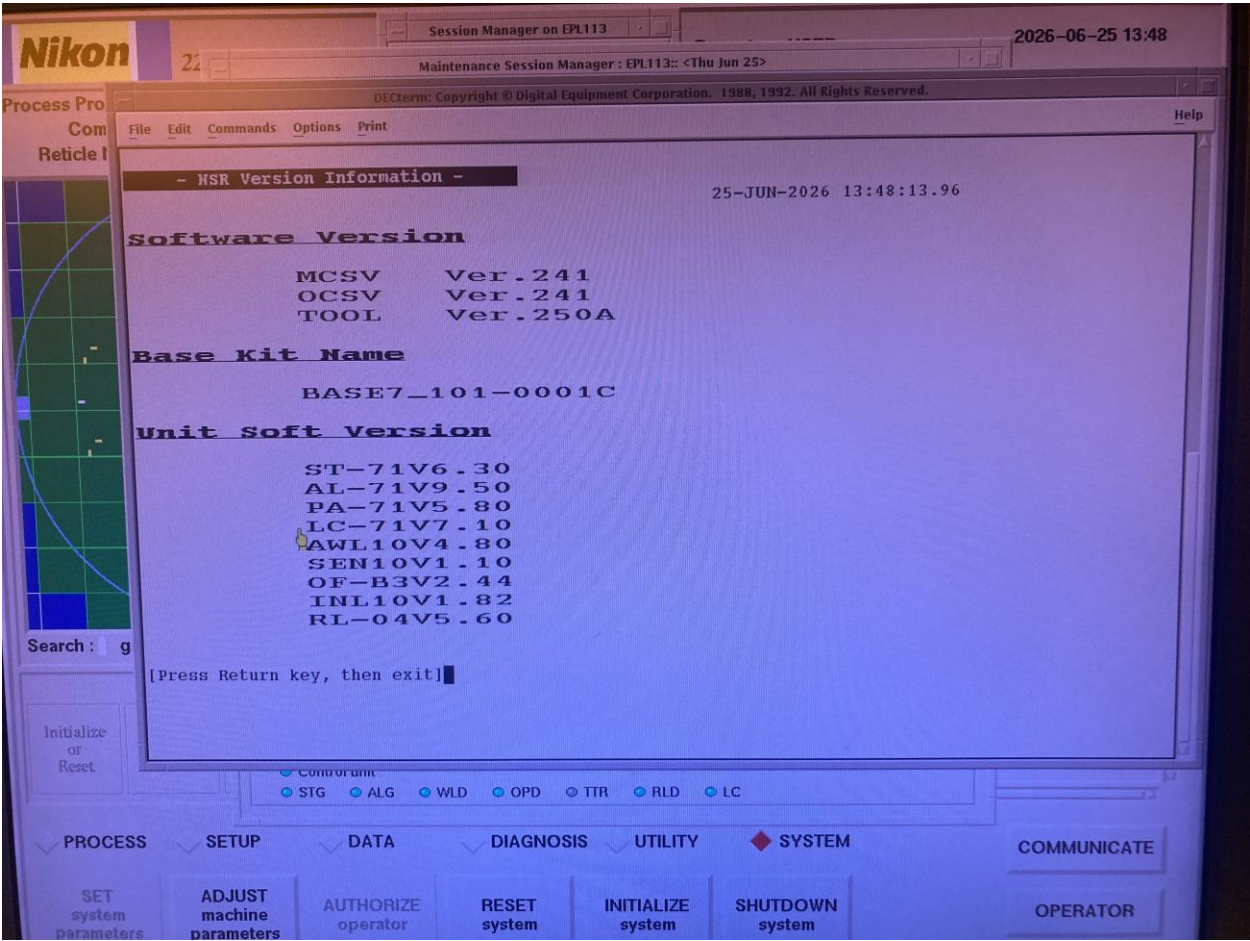


No	ITEM	SPEC	RESULT
1	Total Focus Deviation	Max-Min $\leq 0.20\mu\text{m}$	0.282 μm
2	Lens Astigmatism	$ V-H \leq 0.30\mu\text{m}$	0.282 μm
3	Lens Dynamic Distortion	X,Y = Within $\pm 50\text{nm}$	X = -20nm~31nm Y = -29nm~11nm
4	Wafer Flatness Accuracy	1) Flat Within $\geq$ Max-Min 3.0 μm 2) L.F.S Within $\geq$ Max-Min 0.8 μm	1. 1.74 μm 2. 0.84 μm
5	Exposure Power	Within $\geq 650\text{mW}/\text{cm}^2$	336mW/cm2
6	Illumination Uniformity	Within $\pm 1.5\%$	1.36%
7	Stage Precision Accuracy 1) Stepping Accuracy 2) Backlash Accuracy	1) $3\sigma \leq 50\text{nm}$ 2) $3\sigma \leq 50\text{nm}$	1) X: 18nm Y: 21nm 2) X: 20nm Y: 18nm
8	Wafer Pre-Alignment Repeatability	$3\sigma \leq 15\mu\text{m}$	X : 4.850 μm Y : 12.162 μm T : 9.817 μm
9	Integrator Accuracy	Target: Ave $\leq 1\%$	Ave Max = 0.0025%
10	Alignment Accuracy 1) FIA-EGA 2) LSA-EGA	FIA-EGA = $ M + 3\sigma \leq 75\text{nm}$ LSA-EGA = $ M + 3\sigma \leq 75\text{nm}$	1) X = $\pm 50\text{nm}$ Y = $\pm 30\text{nm}$ 2) X = $\pm 40\text{nm}$ Y = $\pm 40\text{nm}$

Software

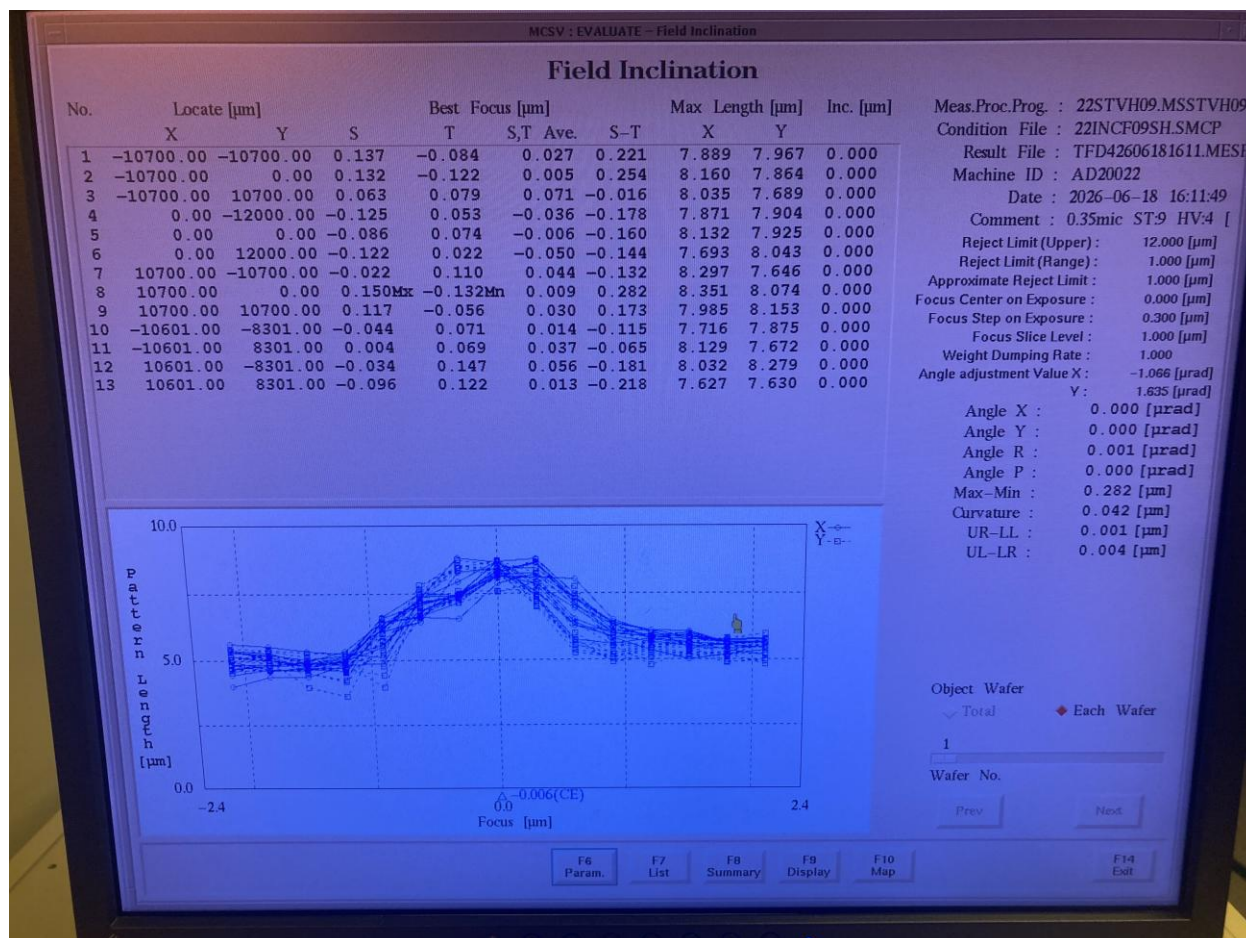


1. Total Focus Deviation (2026):

(0.25 μ m L&S / 15Point V/H)

SPEC: Max-Min $\leq$ 0.20 μ m

Result: Max – Min = 0.282 μ m

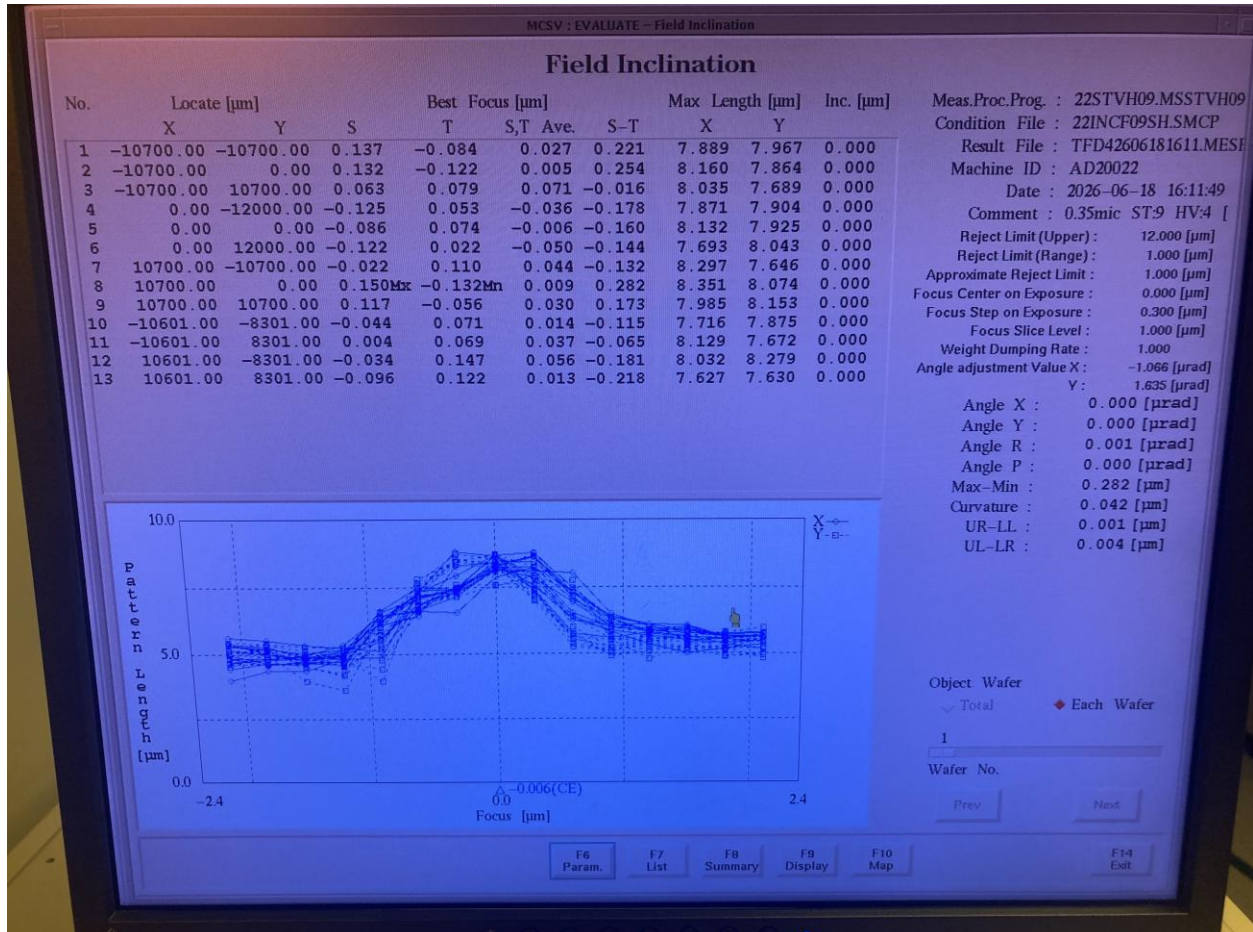


2. Lens Astigmatism (2026):

(0.25 μ m L&S / 15Point V/H)

SPEC: $|V-H| \leq 0.20\mu\text{m}$

Result: $|V-H| = 0.282\mu\text{m}$

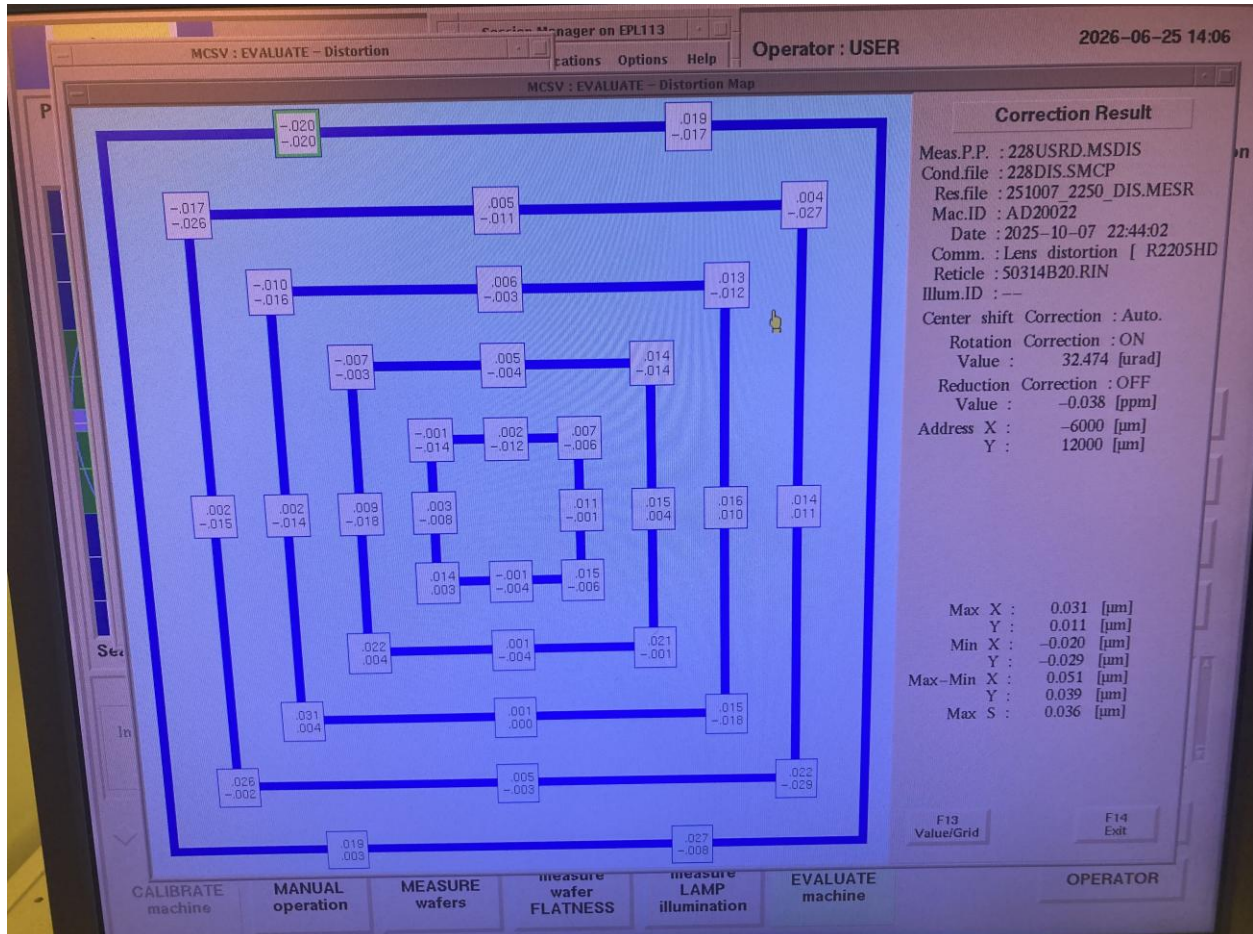


3. Lens Dynamic Distortion (2025):

SPEC: X,Y = Within $\pm 50\text{nm}$

Result: X = $-20\text{nm} \sim 31\text{nm}$

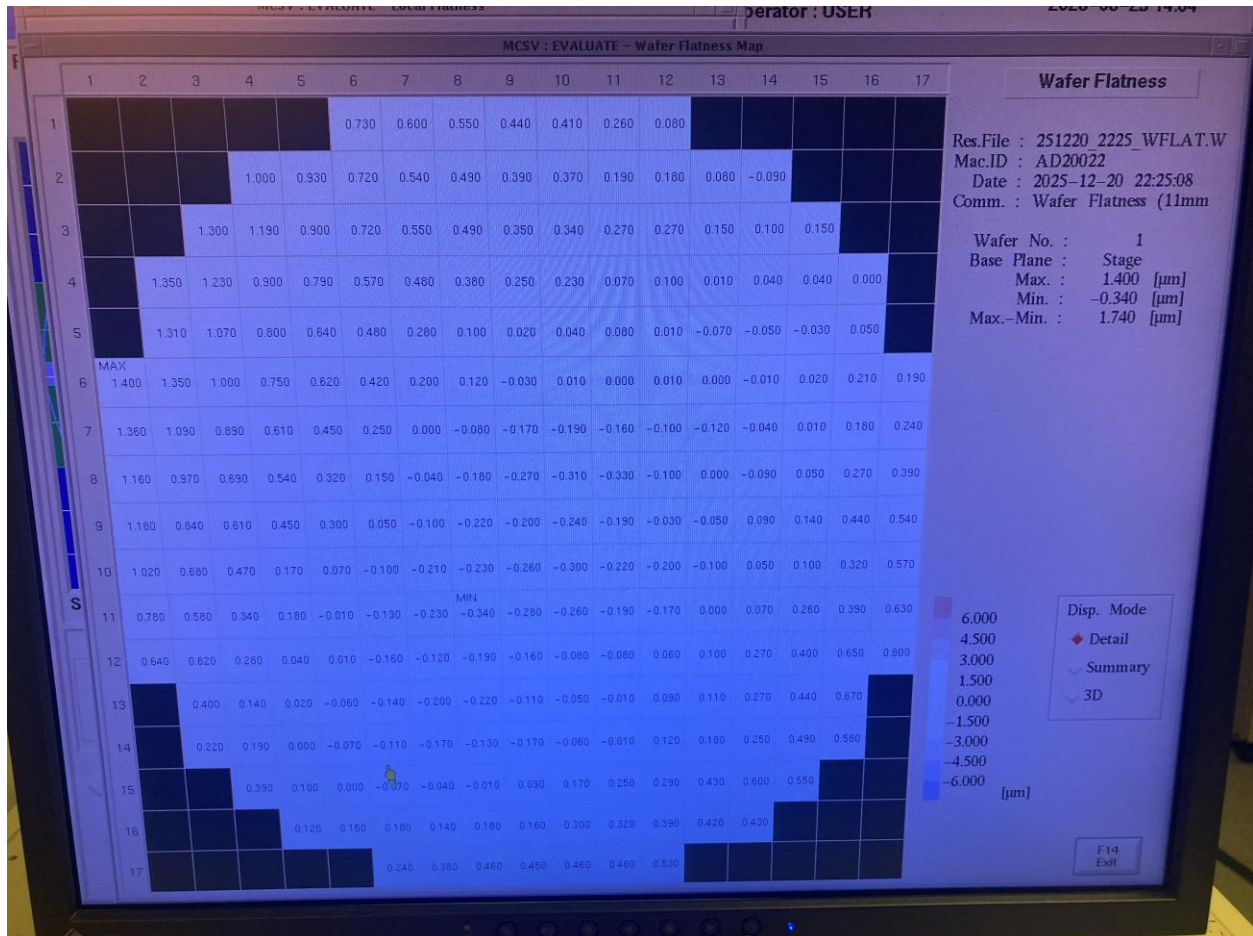
Y = $-29\text{nm} \sim 11\text{nm}$



4. Wafer Flatness Accuracy (2025):

SPEC: 1) Flat Within $\geq$ Max-Min $3.0\mu\text{m}$

Result: Max-Min = $1.74\mu\text{m}$



SPEC: 2) L.F.S Within $\geq$ Max-Min $0.8\mu\text{m}$

Result: Max-Min = $0.84\mu\text{m}$

MCSV : EVALUATE - Local Flatness

Operator : USER

2026-06-25 14:04

MCSV : EVALUATE - Local Flatness Map

Local Flatness

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1						0.200	0.180	0.160	0.140	0.220	0.330	0.180					
2				0.300	0.460	0.390	0.240	0.250	0.210	0.200	0.260	0.190	0.270	0.240			
3			0.400	0.400	0.470	0.450	0.340	0.290	0.260	0.320	0.270	0.260	0.240	0.190	0.240		
4		0.280	0.450	0.660	0.710	0.620	0.620	0.530	0.450	0.300	0.330	0.340	0.320	0.220	0.180	0.150	
5		0.310	0.600	0.610	0.480	0.590	0.450	0.510	0.370	0.250	0.220	0.150	0.170	0.090	0.240	0.210	
6	0.310	0.460	0.700	0.620	0.550	0.640	0.580	0.450	0.290	0.250	0.240	0.200	0.120	0.110	0.230	0.270	0.140
7	0.390	0.710	0.610	0.680	0.600	0.660	0.600	0.470	0.430	0.320	0.330	0.330	0.130	0.130	0.300	0.370	0.200
8	0.320	0.750	0.640	0.590	0.560	0.550	0.470	0.230	0.190	0.150	0.300	0.330	0.190	0.260	0.480	0.530	0.300
9	0.500	0.690	0.800	0.620	0.640	0.530	0.380	0.220	0.120	0.090	0.210	0.300	0.150	0.190	0.410	0.520	0.270
10	0.440	0.640	0.660	0.620	0.580	0.530	0.390	0.180	0.100	0.110	0.230	0.200	0.260	0.310	0.370	0.490	0.250
11	0.380	0.740	0.640	0.460	0.330	0.220	0.210	0.220	0.200	0.220	0.360	0.320	0.470	0.500	0.600	0.700	0.310
12	0.240	0.640	0.580	0.400	0.320	0.190	0.220	0.150	0.290	0.270	0.350	0.300	0.440	0.440	0.600	0.400	0.410
13		0.450	0.620	0.350	0.160	0.160	0.090	0.110	0.170	0.150	0.200	0.260	0.190	0.390	0.400	0.310	
14		0.160	0.300	0.450	0.240	0.200	0.160	0.290	0.390	0.360	0.340	0.440	0.510	0.440	0.330	0.140	
15			0.390	0.390	0.230	0.320	0.310	0.330	0.430	0.490	0.450	0.430	0.310	0.420	0.300		
16					0.270	0.220	0.380	0.530	0.490	0.470	0.370	0.360	0.240	0.180	0.170		
17						0.140	0.240	0.320	0.290	0.300	0.160	0.210					

Res.File : 251220 2225_WFLAT.W
Mac.ID : AD20022
Date : 2025-12-20 22:25:08
Comm. : Wafer Flatness (11mm)

Wafer No. : 1
Base Plane : Stage
Max. : 1.400 [um]
Min. : -0.340 [um]
Max.-Min. : 1.740 [um]
L.F.S. Mode : 3AST
L.F. Max. : 0.840 [um]

1.440
1.280
1.120
0.960
0.800
0.640
0.480
0.320
0.160
0.000 [um]

Disp. Mode
☒ Detail
☒ Summary
☒ 3D

F14
Exit

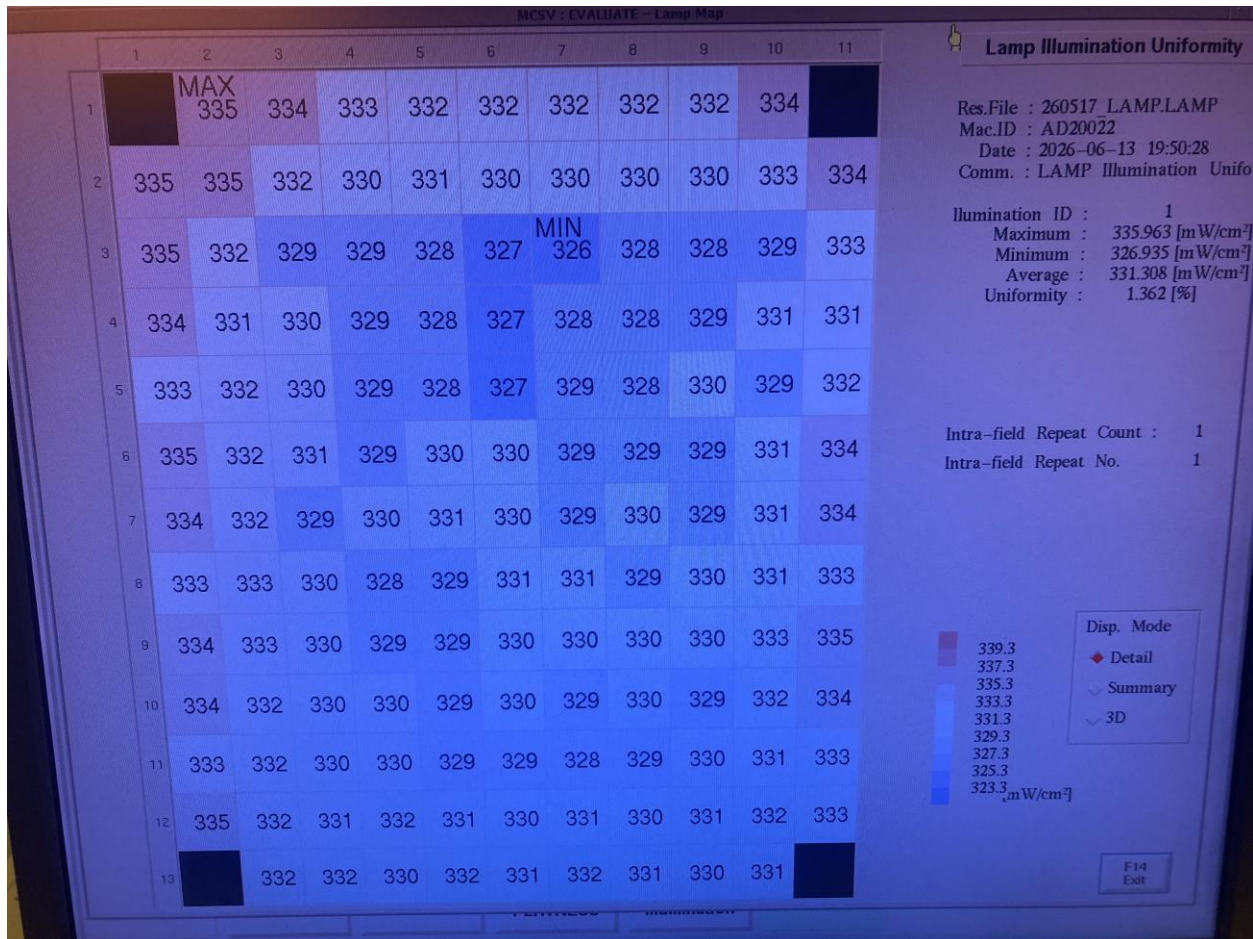
5/6 Exposure Power / Uniformity (2026):

SPEC: Power = Within $\geq 650\text{mW/cm}^2$

Spec: Uniformity Within $\pm 1.5\%$

Result: 1) Illumination Power = 336mW/cm^2

2) Uniformity = 1.365%



7. Stage Precision Accuracy (2025):

SPEC: Step X,Y $3\sigma \leq 50\text{nm}$

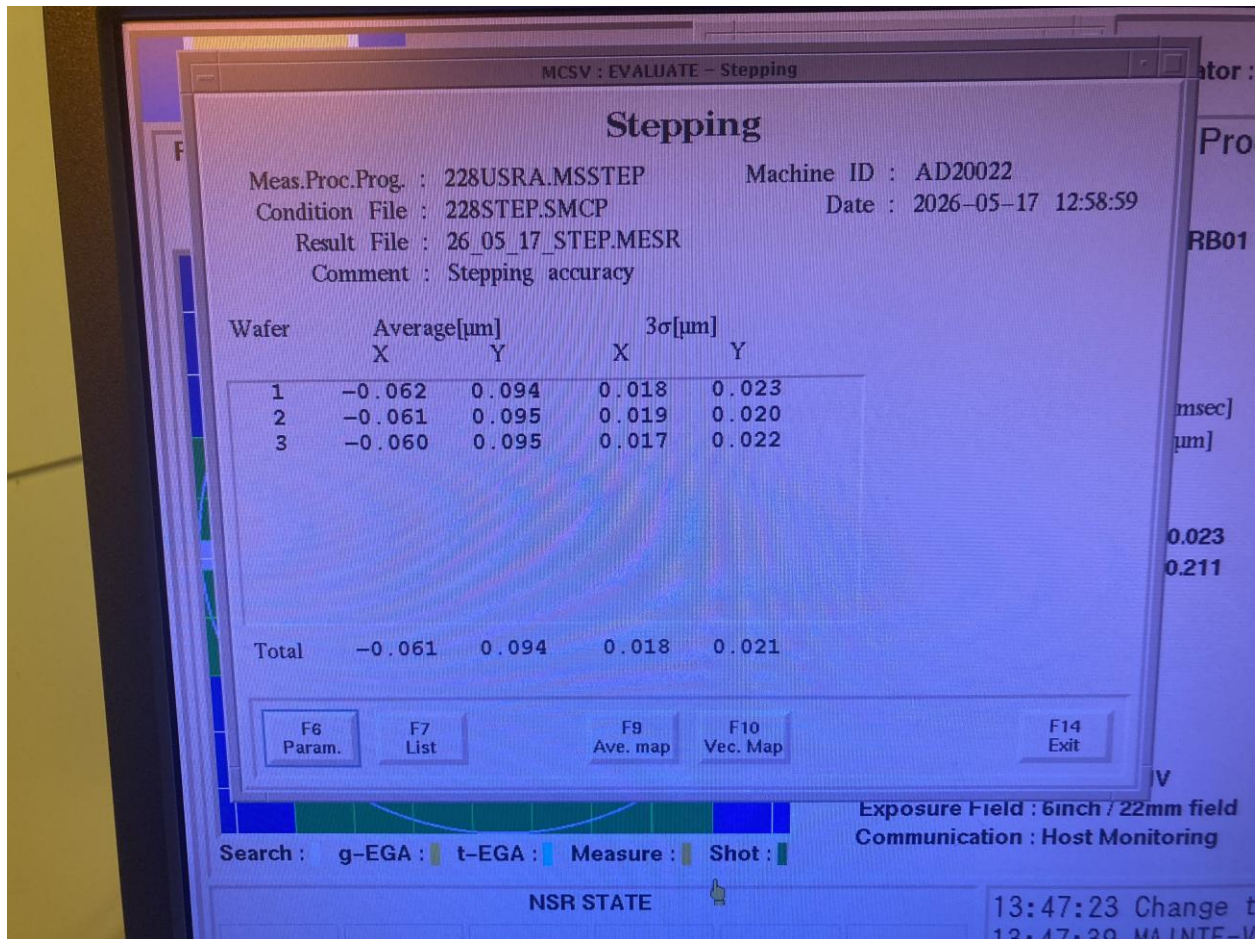
Backlash X,Y $3\sigma \leq 50\text{nm}$

Result:

1) Stepping Accuracy

X(3σ) : 18nm

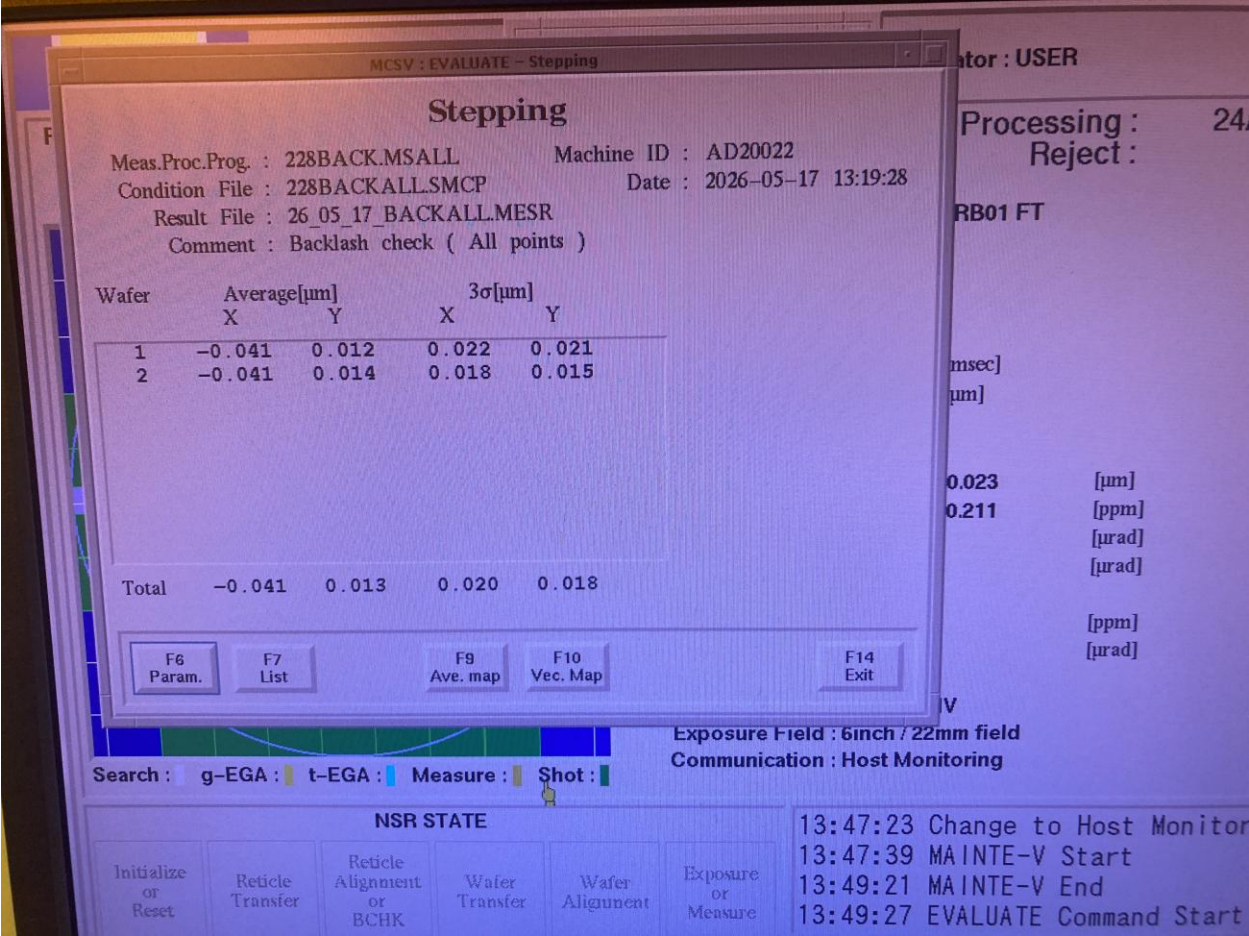
Y(3σ) : 21nm



2) Backlash Accuracy

X(3σ) : 20nm

Y(3σ) : 18nm



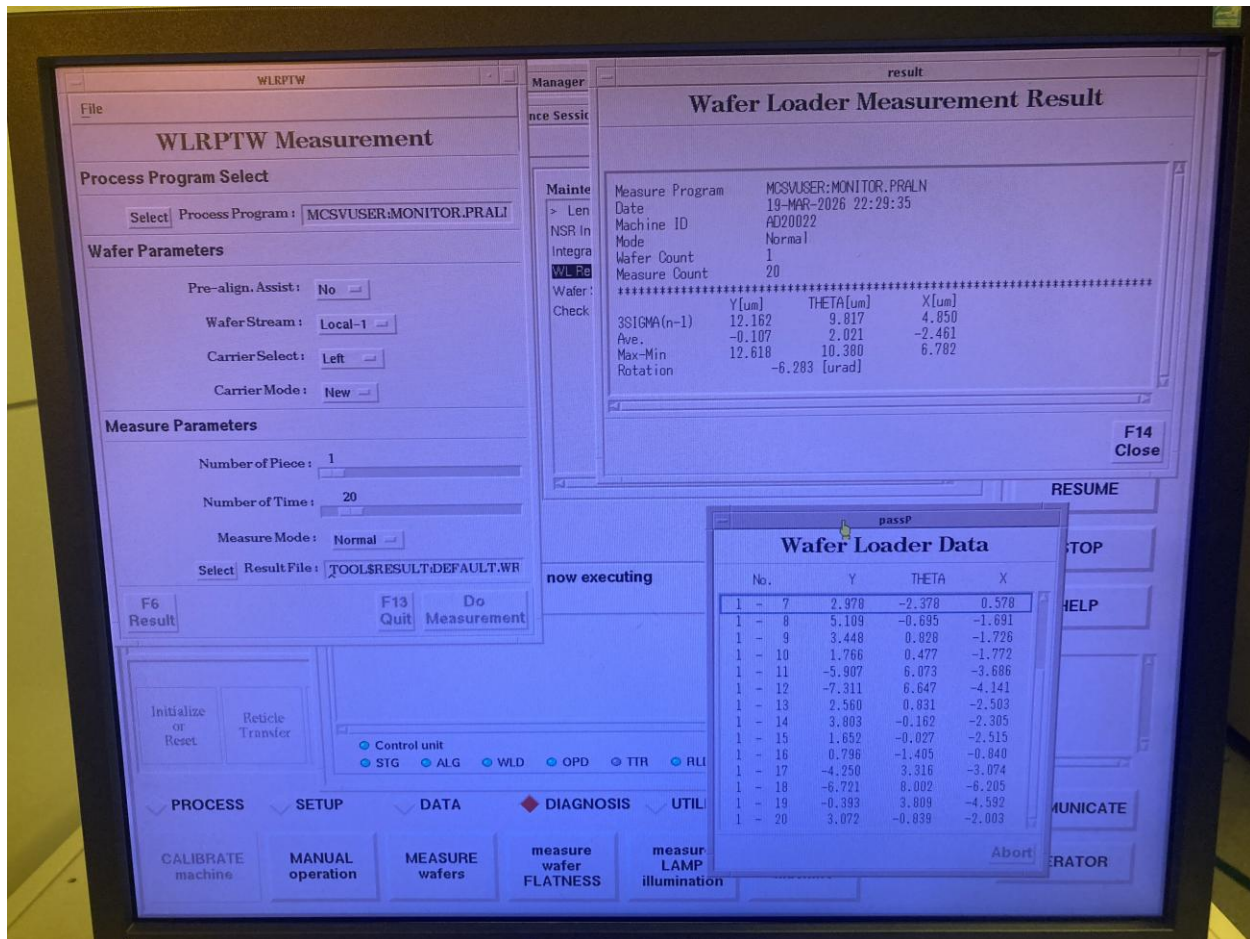
8. Wafer Pre-Alignment Repeatability (2026):

SPEC: $3\sigma \leq 15\mu\text{m}$

Result: $X(3\sigma) = 4.850\mu\text{m}$

$Y(3\sigma) = 12.162\mu\text{m}$

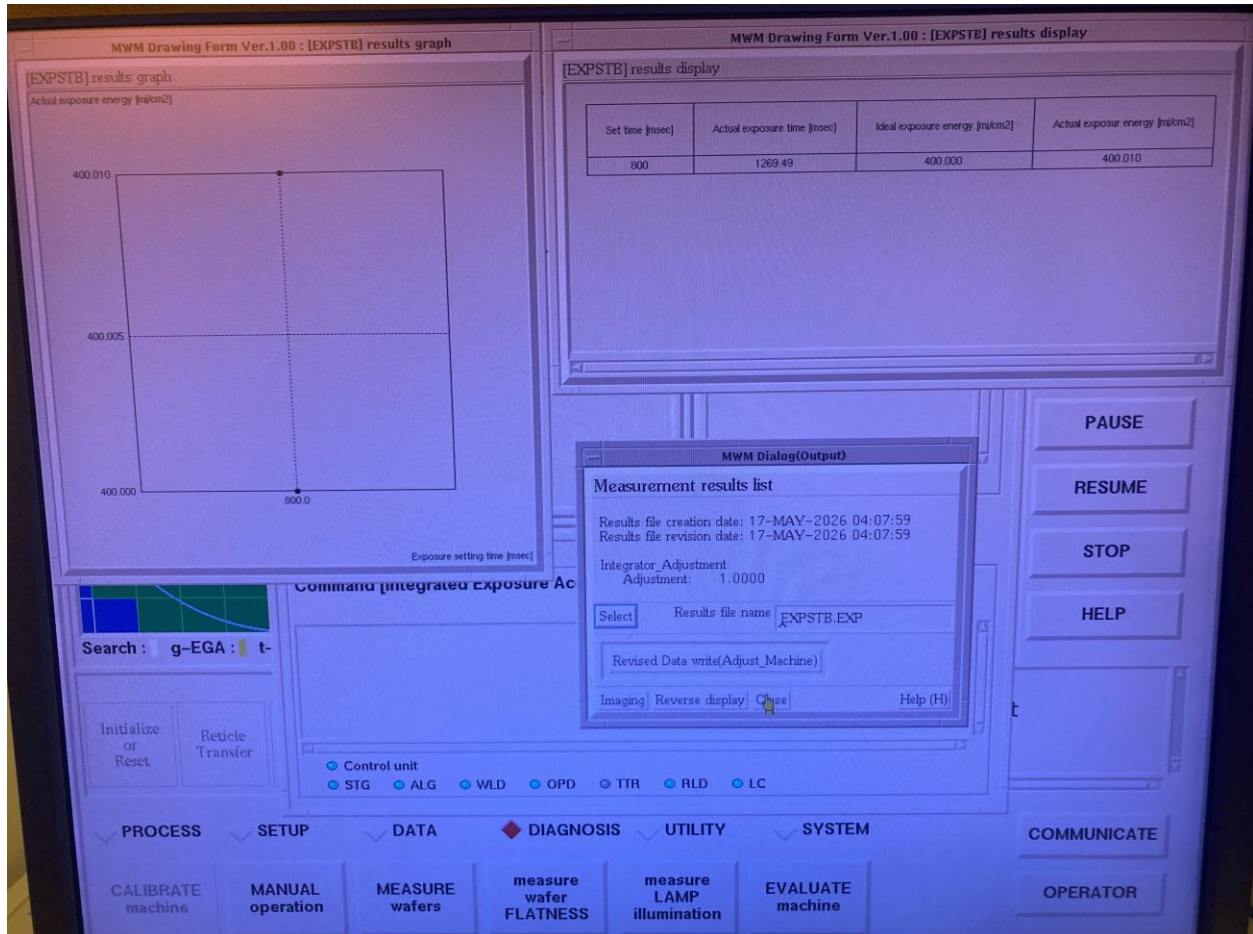
$T(3\sigma) = 9.817\mu\text{m}$



9. Integrator Accuracy (2026):

SPEC: Ave $\leq 1.0\%$

Result: Max = 0.0025%

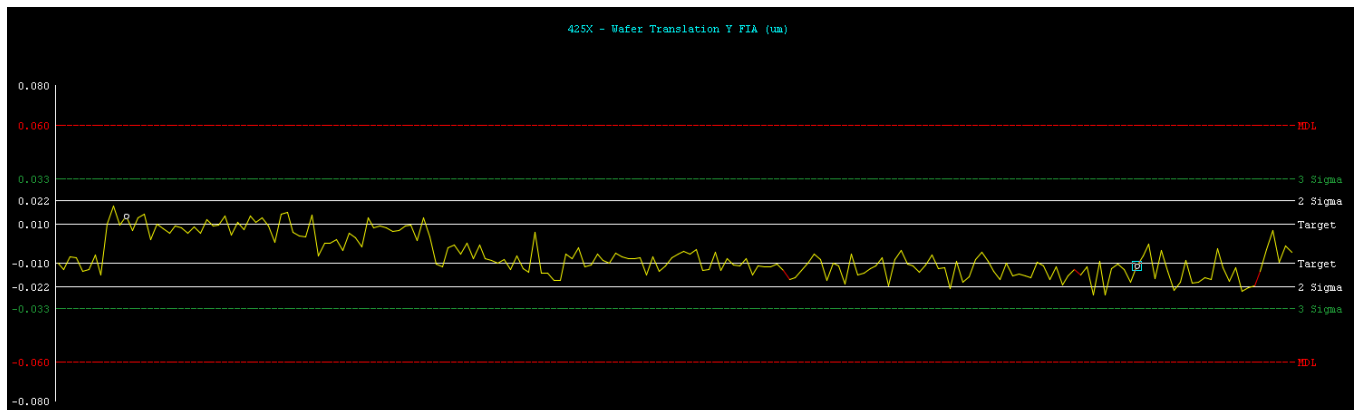
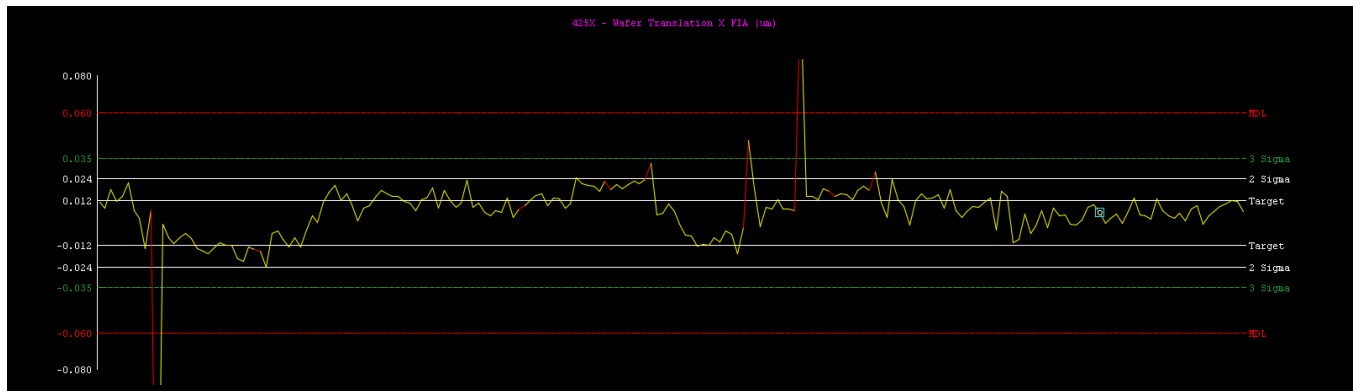


10-1 FIA (2026):

SPEC: FIA-EGA = $|M| + 3\sigma \leq 70\text{nm}$

Result: FIA-EGA X = 50nm

FIA-EGA Y = 30nm



10-2 LSA (2026):

SPEC: LSA-EGA = $|M| + 3\sigma \leq 70\text{nm}$

Result: LSA-EGA X = 40nm

LSA-EGA Y = 40nm

